



Our ref.: LR L2017-007

Subject: UL Certificate of compliance for UTO connectors with their contacts.

Champagné, 26th June 2017.

Mrs, Mr,

Following the tests that we have performed in UL organism, we confirm that UTO serie connectors are UL recognized components in conformity with UL 1977 & CSA-C22.2 n°182.3 standards, respectively ECBT2 and ECBT8 categories.

Component – Connectors for use in data, signal, control and power applications.

✓ Connectors UTO Series:

- Project 12CA14828 May 29, 2012 (Vol 1 sec 8)
- Service Request 1827288.351623 Revised: July 31, 2003 (Vol 1 sec 13)
- Service Request 1827288.351623 March 3, 2006 (Vol 1 sec 15)
- Service Request 1827288.351623 January 25, 2011 (Vol 1 sec 19)

Please find on the following pages , the UL certification of compliance and the rated current qualified according to connector part number Best regards,

Céline COUSIN

Qualité développement

SOURIAU – **Etablissement Sarthe**: RN 23 – 72470 Champagné – France Tél: 33 2 43 54 35 00 – fax: 33 2 43 54 35 01 – N°Siret: 421 320 268 00046



1. UTO Series OVERVIEW

Layouts (Electrical parameter according to UL1977)

Shell size	Contact #1	16 (Ø 1.6)	Contact #20 (Ø 1.0)	Contact #8 (Ø 3.6)	Mixed power
10	103 10A 500V 2 contacts +ground 3x01.6 (#16)	104* 10A 500V 4 contacts 4x01.6 (#16)	106* 5A 250V 6 contacts 6x21 0 (920) O O O O O O Page 44		102W2 103W3 20A 50V 4 contacts 2x02 4 (21) 2x01.0 (820) 3x01.0 (820) Page 32 Page 40
12	124 16A 500V 3 contacts +ground 4c07.6 (#16)	128 10A 500V 8 contacts 8x01.6 (#16)	1210* 5A 250V 10 contacts 10x01.0 (923)		
14	147 10A 500V 6 contacts + ground 7x61 & (#14) Page 48 149 10A 5 12 con 12 con 12 con	500V stacts 5 (#16)	1419 5A 250V 19 contacts 19x(201.0 (#20)	142G1 44A 600V 2 contacts + ground 3x03.6 (#8) Page 24	148 25A 250V 8 contacts \$6024 #12 \$4021 \$4 #12 \$401 \$4 #14 \$400 \$6
16	161 9A.5 19 car 19:001	ntacts 6 (#16)	1626 4A 250V 26 contacts 26x(01.0 (9/20))		

Contacts #16: from AWG 30 to 14, 0.05 to 2.5 mm²	Contacts #20: from AWG 26 to 18, 0.13 to 0.93 mm ²	Contacts #8: Contacts #12: from AWG 16 to 8, fromAWG 22 to 12, 1.5 to 10 mm² 0.13 to 4 mm²
Shell size	Contact #16 (Ø 1.6)	Contact #20 (Ø 1.0)
18	1823 8A 500V 23 contacts 23x01.6 (#16)	1832 4A 250V 32 contacts 32 contacts 32 contacts 40 000 60 000 60 000 60 000 60 000 60 000 60 000 60 000 60 000 60 000
20	2028 5A 500V 28 contacts 28x014 (#16) 20x014 (#16) 20x015 (#16) 20x01	2041 3A 250V 41 contacts 41:610 (#20)
22	2235 5A 500V 35 contacts 35x01.6 (#16) 38x01.6 (#16) 38x01.6 (#16) 38x01.6 (#16) 38x01.6 (#16) 38x01.6 (#16) 38x01.6 (#16)	2255 3A 250V 55 contacts 55x01.0 g/20)
24	2448 5A 500V 48 contacts 48x01.6 (#16)	2461 3A 250V 61 contacts 61x01.0 ((20)



2. UTO Serie

a. UL certification:

Report E169916-20161129: UL1977 - CAN/CSA C22.2 No. 182.3

CERTIFICATE OF COMPLIANCE

Issued to: SOURIAU

RD 323, 72470 CHAMPAGNE FRANCE

This is to certify that

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

See next Page for Models

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 1977, Component Connectors for Use in Data, Signal, Control and Power Applications

CAN/CSA C22.2 No. 182.3-M1987, Special Use Attachment Plugs, Receptacles and Connectors

Additional Information:

See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark TM, may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

Bamery

Bruce Mahrenholz, Director North American Certification Program

OF ITC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please





Certificate Number 20161129-E169916
Report Reference E169916-20120529
Issue Date 2016-NOVEMBER-29

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Models:

USR/CNR Component Connector, Series UT0, followed by 6, followed by 1412, followed by P or S, followed by H02.

USR/CNR Component Connector, Series UT0, followed by 7, followed by 1412, followed by P or S, followed by H660.

USR/CNR Component Connector, Series UT0, followed by 0, 1, 6 or 7, followed by 148, 1492, 2030 or 2238 followed by P or S, maybe followed by W,X,Y or Z, followed by H or H6, maybe followed by 01, 02 or 05.

Bay Wall & Bruce Mahrenholz, Devector North American Certification Program UL LLC

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Page 2 of 2



Report E169916-20000810 : UL1977

CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference

20140714-E169916 E169916-20000810 2014-JULY-14

Issued to:

Issue Date

SOURIAU SAS

RD 323

72470 CHAMPAGNE FRANCE

This is to certify that representative samples of COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

Series UTO Bantam

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 1977, Component Connectors for Use in Data, Signal,

Control and Power Applications

Additional Information:

See the UL Online Certifications Directory at www.ul.com/database for additional information

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Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.

William R. Carney, Director, North American Certification Program.

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Report E169916-20140714: UL1977

CERTIFICATE OF COMPLIANCE

Certificate Number 20140714-E169916 Report Reference E169916-20060303 2014-JULY-14

Issued to: SOURIAU SAS

RD 323

72470 CHAMPAGNE FRANCE

This is to certify that COMPONENT - CONNECTORS FOR USE IN DATA, representative samples of SIGNAL, CONTROL AND POWER APPLICATIONS

Series UTOW High Density Metal Circular Connectors

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1977, Component Connectors for Use in Data, Signal,

Control and Power Applications

Additional Information: See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Recognized Component Mark should be considered as being covered by UL's Recognition and Follow-Up Service.

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Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.

William R. Carry

William R. Carney, Director, North American Certification Programs
UL LLC

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Report E169916-20140714: UL1977

CERTIFICATE OF COMPLIANCE

Certificate Number 20140714-E169916 Report Reference **Issue Date**

E169916-20110125 2014-JULY-14

SOURIAU SAS Issued to:

RD 323

72470 CHAMPAGNE FRANCE

This is to certify that representative samples of

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

Connector, Cat. No. UTO7142G1PH6.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 1977, Component Connectors for Use in Data, Signal,

Control and Power Applications

Additional Information:

See the UL Online Certifications Directory at www.ul.com/database for additional information

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Look for the UL Recognized Component Mark on the product.





b. Rated current qualified according to connector part number and contact.

	No. of	Crimp	Machined	Conductor	Voltage,	Ampe	ere, A
Cat. Nos.	poles	Contact Size	Crimp Contact	Sizes, AWG Str	Voltage, Vac	UL	CSA
UT0-1412 UT071412PH660	12	#16	RM16M23K RC16M23K	16	500	10	7
UT071412SH660 UT061412PH02 UT061412SH02	12	#16	SM16M1S6 SC16M1S6	16	500	10	7.5
UT0-142G1 UT07142G1PH6	(power)	3.55	82911683N	10	600	44	
UT0-148, UT00148PH UT00148PH6 UT00148SH UT00148SH6 UT06148PH02 UT06148PH	4 (power)	#12	82911464A/ 82911465NA	14	600	25	17
UT06148SH02 UT06148SH UT07148PH UT07148PH601 UT07148PH6 UT07148SH UT07148SH601 UT07148SH6	4 (signal)	#16	RM16M23K RC16M23K	20	600	5	5
UT0-1492 UT001492PH UT001492PH6 UT001492SH UT001492SH6 UT001492SWH UT001492SXH UT001492SYH UT001492SYH	12	#16	RM16M23K RC16M23K	16	500	10	7
UT061492PH02 UT061492PH UT061492PYH UT061492PYH UT061492SH02 UT061492SH UT061492SWH UT071492PH01 UT071492PH	12	#16	SM16M1S6 SC16M1S6	16	500	10	7.5



	No. of	Crimp	Machined	Conductor	Voltage,	Ampo	ere, A
Cat. Nos.	poles	Contact Size	Crimp Contact	Sizes, AWG Str	Vac	UL	CSA
UT0-2030 UT002030PH UT002030PH6 UT002030SH UT002030SWH UT002030SWH UT012030SH UT062030PH02 UT062030PH UT062030SH UT072030PH UT072030PH UT072030SH01 UT072030SH	30	#16	RM16M23K RC16M23K	16	500	5	5
UT0-2238 UT002238PH UT002238PH6 UT002238PWH6 UT002238PWH6 UT002238PXH UT002238SH UT002238SH UT062238SH UT062238SH UT062238SWH UT062238SWH UT062238SWH UT072238PH UT072238PH UT072238PH UT072238PH UT072238SH6 UT072238SH6	38	#16	RM16M23K RC16M23K	16	500	5	5

These devices have not been tested for interrupting the flow of current by connecting or disconnecting the mating connector. These devices should be used only where they will not interrupt the flow of current.



3. Qualification report associated

JQP2012-070: Extract of UL report "UTO" Serie E169916

• Volume 1 section 8



4. Crimp Tooling





Contact size	Part number	Head*	Handles*	
	RM/RC 24W3K			
	RM/RC 20W3K	S2ØRCM		
#20	RM/RC 18W3K			
Ø0.039"	SM 24WL3S*(1)			
	SC 24WL3S*(1)	S20SCM20		
	SM/SC 20WL3S*(1)			
	RM/RC 28M1*			
	RM/RC 24M9*	S16RCM20	SHANDLES	
	RM/RC 20M13*	SIGKCHZO		
	RM/RC 20M12*			
	RM/RC 16M23*	S16RCM16		
#16 Ø0.062"	RM/RC 14M30*	S16RCM14		
00.062	SM/SC 24ML1*(1)	C1 CCCH20		
	SM/SC 20ML1*(1)	S16SCM20		
	SM/SC 16ML1*(1)	C1 CCCM1 1		
	SM/SC 14ML1*(1)	S16SCML1		
	SM/SC 16ML11*(1)	S16SCML11		

C	Dark assert ass	Tool with separate locator			
Contact size	Part number	Hand tool Positioner + loc		ator setting	
	82911457N* / 82911456*			1-2	
	82911459N* / 82911458*	M317		2	
#12	82911461N* / 82911460*		V65400774	2	
Ø0.094"	82911463N* / 82911462*		VGE10077A	3	
	82911465N* / 82911464*			3	
	82911467N* / 82911466*			4	
	82913601A / 82913600A	M317		3	
40	82913603A / 82913602A			3	
#8 Ø0.141"	82913605A / 82913604A		VGE10078A	4	
00.141	82913607A / 82913606A			5	
	82913609A / 82913608A			6/7	